

ABSTRACT

Within a fixing roller (231) are disposed a main heater lamp (234a) for heating a central portion of the fixing roller and a sub-heater lamp (235a) for heating opposite end portions of the fixing roller. MR_{nh} , SR_{nh} and ΣR_{nh} satisfy the formula (1) or (2):

$$\Sigma R_{nh} \geq 30.5 \cdot \ln(Ht) + 382 \quad \dots \quad \dots \text{formula (1)}$$

$$MR_{nh} \leq -21.9 \cdot \ln(Ht) - 198 \quad \dots \quad \dots \text{formula (2)},$$

where MR_{nh} is a mean value of heat distribution in a no-heat generating section of the main heater lamp; SR_{nh} is a mean value of heat distribution in the a no-heat generating section of the sub-heater lamp; ΣR_{nh} is the sum total of these mean values; and $Ht = v_p / (Mh \cdot \lambda)$ where v_p is a fixing speed (m/s), Mh a heat capacity per unit length of the heating member ($J/(\text{°C} \cdot \text{m})$) and λ a heat conductivity of a material forming the heating member ($W/(m \cdot \text{°C})$).